

Algebra 2
Mrs. Britton
Section 7.3: Factors of Polynomials

Name: _____

Date: _____

Use substitution to determine whether the given linear expression is a factor of the polynomial. *****SHOW ALL YOUR WORK*****

1. $x^2 + x + 1; x - 1$	2. $x^2 + 2x + 1; x + 2$
3. $x^3 + 3x^2 - 33x - 35; x + 1$	4. $x^3 + 5x^2 - 18x - 48; x + 6$
5. $x^3 + 3x^2 - 18x - 40; x - 4$	6. $x^3 - 8x^2 + 9x + 18; x - 6$

<p>7. $x^3 + 6x^2 - x - 30; x - 2$</p>	<p>8. $x^3 - x^2 - 17x - 15; x + 3$</p>
<p>9. $2x^3 + 9x^2 + 6x + 8; x + 4$</p>	<p>10. $2x^3 - x^2 - 12x - 9; x - 3$</p>